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Kimberly J. Rush

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EXAMINER

CHOUDHURY, AZIZUL Q

ART UNIT

PAPER NUMBER

2145

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/606,641

Applicant(s)

RUSH ET AL.

Examiner

Azizul Choudhury

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Detailed Action***

This office action is in response to the correspondence received on September 30, 2005.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle et al (US Pat No: 5838906) in view of Held et al (US Pat No: 5802367), hereafter referred to as Doyle and Held, respectively.

1. With regards to claim 21, Doyle teaches through Held, the method for accessing multiple types of electronic content, comprising: receiving a request for a computer program to process an input to obtain an output comprising a type of content that is unknown to the computer program, wherein a service manager connects the computer program to at least one service container to process the input to obtain the output, wherein said at least one service container includes at least a data object, a code object, and a loader identification that enable definition of the type of content unknown to the computer program; selecting at

least one segment of computer code from a plurality of segments of computer code that will enable the computer program to process the input, when the at least one segment of computer code is executed along with the computer program, to provide the output comprising the type of content that is unknown to the computer program, the at least one segment of computer code being selected without reference to any embedded link by said computer program; and executing the at least one segment of computer code along with the computer program to process the input and obtain the output comprising the type of content that is unknown to the computer program, wherein the plurality of segments of computer code and the at least one segment of computer code are not executable as an independent computer program

(Doyle teaches a design that features a “list of applications,” (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle’s design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16,

Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Multiple surrogate process means are taught by Held (column 10, line 14 – column 20, line 37, Held) however, in each of the means, an instance of the surrogate process is equivalent to the service container. Within an instance of a surrogate process, there can be found server code, a registration database and objects. For example purposes, correlations between these surrogate process elements and the claimed service container elements will be drawn using a surrogate process in a network environment (column 10, line 14 – column 11, line 40, Held). An instance of a surrogate process requires objects and multiple types of objects are available that are equivalent to the claimed data object, including class factory object, new object or existing object. As for the claimed code object, Held's design makes use of something called "server code." A "server code" is used to reference to executable code. Finally, Held's design makes use of a registration database. It allows elements to be located and hence means for the claimed "loader identification" are present within Held's design as well.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

2. With regards to claim 22, Doyle teaches through Held, a method wherein selecting at least one segment of computer code comprises selecting at least two segments of computer code from the plurality of segments of computer code whose combined functionality will enable the computer program to process the input, when the at least two segments of computer code are executed along with the computer program, to provide the output comprising the type of content that is unknown to the computer program, the at least two segments of computer code being selected based upon the functionality that each provides

(Doyle teaches a design that features a “list of applications,” (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide, as claimed. No limitation is given as to how many applications may be selected to run together, hence two or more may be selected as claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed.

However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a

first program without reference to an embedded link. Plus, Held teaches how processes are selected based on how well it will function (for instance with regards to compatibility with the first program) (column 7, line 58 – column 8, line 12, Held).

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

3. With regards to claim 23, Doyle teaches through Held, the method further comprising configuring the at least two segments of computer code to be executed along with the computer program in a particular order to provide a desired processing of the input

(Doyle teaches a design that features a “list of applications,” (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide, as claimed. No limitation is given as to how many applications may be selected to run together; hence two or more may be selected as claimed. Whenever multiple applications run together to produce a single output, it is inherent that they will perform in order as claimed.

In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

4. With regards to claim 24, Doyle teaches through Held, a method further comprising configuring the at least two segments of computer code into a master-slave relationship that causes the execution of one of the at least two segments of computer code to be dependent on the execution of another of the at least two segments of computer code



(Doyle discloses how applications can be started as child processes (column 15, line 22, Doyle). When a child process exists, a parent process must exist. This parent-child relationship is equivalent to a master-slave relationship. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

5. With regards to claim 25, Doyle teaches through Held, a method wherein executing the at least one segment of computer code comprises integrating the at least one segment of computer code into the computer program and executing

the computer program to process the input and obtain the output comprising the type of content that is unknown to the computer program

(Doyle teaches a design that features a “list of applications,” (column 15, line 14, Doyle). This list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide. When an application runs along with the original program, Doyle states that it is “embedded” (column 6,, lines 58-59, Doyle). Embedded is equivalent to the claimed integrated. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle’s design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for

transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

6. With regards to claim 26, Doyle teaches through Held, a method wherein receiving a request for a computer program to process an input comprises receiving a command to translate a word from a first language to a second language

(Doyle discloses a design that features a “list of applications,” (column 15, line 14, Doyle). These applications are able to run along with an original program to provide an output from an input the original program is unable to produce alone. No limitation is placed on the type of programs available, hence translation programs are usable within the scope of the design. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle’s design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Plus, no limitation is placed on the type of functionality the second (surrogate) program or process can provide.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

7. With regards to claim 27, Doyle teaches through Held, a method wherein receiving a request for a computer program to process an input comprises receiving a command to convert a number from a first number format to a second number format

(Doyle discloses a design that features a “list of applications,” (column 15, line 14, Doyle). These applications are able to run along with an original program to provide an output from an input the original program is unable to produce alone. No limitation is placed on the type of programs available, hence number conversion programs are usable within the scope of the design. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of

a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Plus, no limitation is placed on the type of functionality the second (surrogate) program or process can provide.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

8. With regards to claim 28, Doyle teaches through Held, the method wherein receiving a request for a computer program to process an input comprises receiving a command to convert a text object from a first text format to a second text format

(Doyle discloses a design that features a “list of applications,” (column 15, line 14, Doyle). These applications are able to run along with an original program to provide an output from an input the original program is unable to produce alone. No limitation is placed on the type of programs available; hence text format conversion programs are usable within the scope of the design. In addition, since the list of applications is initiated by the system, there must exist a

service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Plus, no limitation is placed on the type of functionality the second (surrogate) program or process can provide.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

9. With regards to claim 29, Doyle teaches through Held, a method wherein receiving a request for a computer program to process an input comprises receiving a command to convert a graphical object from a first graphical format to a second graphical format

(Doyle discloses a design that features a “list of applications,” (column 15, line 14, Doyle). These applications are able to run along with an original program to provide an output from an input the original program is unable to produce alone. No limitation is placed on the type of programs available; hence graphical format conversion programs are usable within the scope of the design. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle’s design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Plus, no limitation is placed on the type of functionality the second (surrogate) program or process can provide.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

10. With regards to claim 30, Doyle teaches through Held, a computer system for accessing multiple types of electronic content, comprising: a processing unit; a memory in communication with the processing unit; and a computer program stored in the memory that provides instructions to the processing unit, wherein the processing unit is responsive to the instructions, operable for: identifying a plurality of segments of computer code that can be executed along with the computer program by the processing unit in response to the instructions; selecting, in response to an input command to access at least one type of content that the computer program is not configured to access, at least one segment of computer code from the plurality of segments of computer code that can be executed along with the computer program by the processing unit, in response to the instructions, to access the at least one type of content that the computer program is not configured to access, wherein a service manager connects the computer program to at least one service container in response to the input command, wherein said computer program is not directed to the plurality of segments of computer code by any embedded link referenced by said computer program and wherein said at least one service container includes at least a data object, a code object, and a loader identification that enable definition of the type of content unknown to the computer program; and executing the at least one segment of computer code along with the computer program to access the at least one type of content that the computer program is not



configured to access; wherein the plurality of segments of computer code and the at least one segment of computer code are not executable as an independent computer program

(Doyle teaches a design that features a "list of applications," (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Multiple surrogate process means are taught by Held (column 10, line 14 – column 20, line 37, Held) however, in each of the means, an instance of the surrogate process is equivalent to the service container. Within an instance of a surrogate process, there can be found server code, a registration database and objects. For example purposes, correlations between these surrogate process elements and the claimed service container elements will be drawn using a surrogate process

in a network environment (column 10, line 14 – column 11, line 40, Held). An instance of a surrogate process requires objects and multiple types of objects are available that are equivalent to the claimed data object, including class factory object, new object or existing object. As for the claimed code object, Held's design makes use of something called "server code." A "server code" is used to reference to executable code. Finally, Held's design makes use of a registration database. It allows elements to be located and hence means for the claimed "loader identification" are present within Held's design as well.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

11. With regards to claim 31, Doyle teaches through Held a computer system wherein the processing unit, responsive to the instructions, is further operable for: arranging in the memory the at least one segment of computer code and a data, comprising the at least one type of content that the computer program is not configured to access, into a function-content group; and interfacing the function-content group to the computer program to enable the computer program

to access the at least one type of content that the computer program is not configured to access

(Doyle teaches a design that features a "list of applications," (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide, as claimed. No limitations are placed as to the number of programs that may be run together. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

12. With regards to claim 32, Doyle teaches through Held, the computer system wherein the processing unit, responsive to the instructions, is operable for identifying a plurality of segments of computer code by: locating at least two segments of computer code from the plurality of segments of computer code that each comprise a portion of computer code that indicates they can be executed by the processing unit along with the computer program; and generating a list in the memory comprising an identifier for each of the at least two segments of computer code that indicates that the at least two segments of computer code are available to be executed by the processing unit along with the computer program

(Doyle teaches a design that features a “list of applications,” (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide, as claimed. No limitation is given as to how many applications may be selected to run together; hence two or more may be selected as claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle’s design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of

a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Plus, Held discloses that multiple classes can be implemented by the same module (hence multiple behaviors/function/services can be made available and selected) (column 5, lines 30-49, Held).

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

13. With regards to claim 33, Doyle teaches through Held, a computer system wherein the processing unit, responsive to the instructions, is operable for selecting at least one segment of computer code by selecting at least two segments of computer code from the plurality of segments of computer code whose combined functionality will allow the computer program to access the at least one type of content that the computer program is not configured to access when the at least two segments of computer code are executed by the processing unit along with the computer program

(Doyle teaches a design that features a “list of applications,” (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide, as claimed. No limitation is given as to how many applications may be selected to run together, hence two or more may be selected as claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Plus, Held discloses that multiple classes can be implemented by the same module (hence multiple behaviors/function/services can be made available and selected) (column 5, lines 30-49, Held).

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method

for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

14. With regards to claim 34, Doyle teaches through Held, the computer system wherein the processing unit, responsive to the instructions, is further operable for configuring the at least two segments of computer code to be executed by the processing unit along with the computer program in a particular order to allow the computer program to access the at least one type of content that the computer program is not configured to access

(Doyle teaches a design that features a “list of applications,” (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide, as claimed. No limitation is given as to how many applications may be selected to run together, hence two or more may be selected as claimed. Whenever multiple applications run together to produce a single output, it is inherent that they will perform in order as claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle’s design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of

a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Plus, Held discloses that multiple classes can be implemented by the same module (hence multiple behaviors/function/services can be made available and selected) (column 5, lines 30-49, Held).

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

15. With regards to claim 35, Doyle teaches through Held, the computer system, wherein the processing unit, responsive to the instructions, is further operable for configuring the at least two segments of computer code into a master-slave relationship that causes the execution of one of the at least two segments of computer code to be dependent on the execution of another of the at least two segments of computer code

(Doyle discloses how applications can be started as child processes (column 15, line 22, Doyle). When a child process exists, a parent process must exist. This parent-child relationship is equivalent to a master-slave relationship.



In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

16. With regards to claim 36, Doyle teaches through Held, a computer-readable medium having computer-executable instructions for accessing multiple types of electronic content, comprising: logic for creating a list that comprises information about a plurality of segments of computer code that can be executed along with a computer program; logic for choosing at least one segment of computer code from the plurality of segments of computer code, based on the information in the

list, that can be executed along with the computer program to process a type of data that the computer program is not designed to process, wherein said computer program is not directed to the at least one segment of computer code by any embedded link referenced by said computer program; logic to execute the at least one segment of computer code along with the computer program in response to an input to provide an output of the type of data that the computer program is not designed to process, wherein a service manager connects the computer program to at least one service container in response to the input, wherein said at least one service container includes at least a data object, a code object, and a loader identification that enable definition of the type of content unknown to the computer program; and wherein the plurality of segments of computer code and the at least one segment of computer code are not executable as an independent computer program

(Doyle teaches a design that features a "list of applications," (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line

65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Multiple surrogate process means are taught by Held (column 10, line 14 – column 20, line 37, Held) however, in each of the means, an instance of the surrogate process is equivalent to the service container. Within an instance of a surrogate process, there can be found server code, a registration database and objects. For example purposes, correlations between these surrogate process elements and the claimed service container elements will be drawn using a surrogate process in a network environment (column 10, line 14 – column 11, line 40, Held). An instance of a surrogate process requires objects and multiple types of objects are available that are equivalent to the claimed data object, including class factory object, new object or existing object. As for the claimed code object, Held's design makes use of something called "server code." A "server code" is used to reference to executable code. Finally, Held's design makes use of a registration database. It allows elements to be located and hence means for the claimed "loader identification" are present within Held's design as well.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method

for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

17. With regards to claim 37, Doyle teaches through Held, he computer-readable medium further comprising logic for choosing at least two segments of computer code from the plurality of segments of computer code, based on the information in the list, which can be executed along with the computer program to process a type of data that the computer program is not designed to process

(Doyle teaches a design that features a “list of applications,” (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. No limitation is given as to how many applications may be selected to run together; hence two or more may be selected claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed.

However, such means are not expressly stated within Doyle’s design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Plus, Held discloses that

multiple classes can be implemented by the same module (hence multiple behaviors/function/services can be made available and selected) (column 5, lines 30-49, Held).

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

18. With regards to claim 38, Doyle teaches through Held, the computer-readable medium, further comprising logic for linking the at least two segments of computer code in a specific order of execution to provide a desired output of data that the computer program is not designed to process when the at least two segments of computer code are executed along with the computer program

(Doyle teaches a design that features a “list of applications,” (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. No limitation is given as to how many applications may be selected to run together; hence two or more may be selected claimed. Whenever multiple applications run together to produce a single output, it is inherent that they will perform in order as claimed.

In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Plus, Held discloses that multiple classes can be implemented by the same module (hence multiple behaviors/function/services can be made available and selected) (column 5, lines 30-49, Held).

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

19. With regards to claim 39, Doyle teaches through Held, the computer-readable medium, wherein the logic for creating a list that comprises information about a plurality of segments of computer code comprises: logic for identifying at least

two segments of computer code that each comprise a registration code that indicates that they can be executed along with the computer program; and logic for generating a list comprising an identification code for each of the at least two segments of computer code that indicates that the at least two segments of computer code are available to be executed along with the computer program

(Doyle teaches a design that features a "list of applications," (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. No limitation is given as to how many applications may be selected to run together; hence two or more may be selected claimed. Whenever multiple applications run together to produce a single output, it is inherent that they will perform in order as claimed. Furthermore, Doyle describes a design that has the means by which to identify the application to be launched from the local user client machine (column 15, lines 18-21, Doyle). In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a

first program without reference to an embedded link. Plus, Held discloses that multiple classes can be implemented by the same module (hence multiple behaviors/function/services can be made available and selected) (column 5, lines 30-49, Held).

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

20. With regards to claim 40, Doyle teaches through Held, computer-readable medium, further comprising logic for arranging the at least one segment of computer code and a data element, comprising the type of data that the computer program is not designed to process, into a function-data group; and logic for interfacing the function-data group to the computer program to enable the computer program to provide the output of the type of data that the computer program is not designed to process

(Doyle teaches a design that features a "list of applications," (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. No limitation is



given as to how many applications may be selected to run together; hence two or more may be selected claimed. Whenever multiple applications run together to produce a single output, it is inherent that they will perform in order as claimed. Furthermore, for data to be processed, it typically is grouped together, for instance within a data structure of some form. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

21. With regards to claims 41, 44 and 47, Doyle teaches through Held, the method wherein each service container comprises a data object, a code object, and a loader identification

(Doyle teaches a design that features a "list of applications," (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager along with reference pointers as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Multiple surrogate process means are taught by Held (column 10, line 14 – column 20, line 37, Held) however, in each of the means, an instance of the surrogate process is equivalent to the service container. Within an instance of a surrogate process, there can be found server code, a registration database and objects. For example purposes, correlations between these surrogate process elements and the claimed service container elements will be drawn using a surrogate process

in a network environment (column 10, line 14 – column 11, line 40, Held). An instance of a surrogate process requires objects and multiple types of objects are available that are equivalent to the claimed data object, including class factory object, new object or existing object. As for the claimed code object, Held's design makes use of something called "server code." A "server code" is used to reference to executable code. Finally, Held's design makes use of a registration database. It allows elements to be located and hence means for the claimed "loader identification" are present within Held's design as well.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

22. With regards to claims 42, 45 and 48, Doyle teaches through Held, the method wherein each code object references at least one service object

(Doyle teaches a design that features a "list of applications," (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. In addition, since the list of applications is initiated by the system, there must exist a service

manager along with reference pointers as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Multiple surrogate process means are taught by Held (column 10, line 14 – column 20, line 37, Held) however, in each of the means, an instance of the surrogate process is equivalent to the service container. Within an instance of a surrogate process, there can be found server code, a registration database and objects. For example purposes, correlations between these surrogate process elements and the claimed service container elements will be drawn using a surrogate process in a network environment (column 10, line 14 – column 11, line 40, Held). An instance of a surrogate process requires objects and multiple types of objects are available that are equivalent to the claimed data object, including class factory object, new object or existing object. As for the claimed code object, Held's design makes use of something called "server code." A "server code" is used to reference to executable code. Finally, Held's design makes use of a registration database. It allows elements to be located and hence means for the claimed "loader identification" are present within Held's design as well.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

23. With regards to claims 43, 46 and 49, Doyle teaches through Held, a method wherein each service object is stored in a cache, separate from each service container

(Doyle teaches a design that features a “list of applications,” (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager along with reference pointers as claimed. However, such means are not expressly stated within Doyle’s design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a

first program without reference to an embedded link. Plus, Held discloses that means for caching exist within the design (column 16, line 62 – column 17, line 5, Held).

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

24. With regards to claim 50, Doyle teaches through Held, a method for accessing; multiple types of electronic content from a program, comprising the steps of: defining a plurality of service containers accessible to the program, each service container corresponding to a specific function, each service container including: a data object, such that each data object includes data required to enable the specific function corresponding to the service container to be achieved; a code object, each code object referencing at least one segment of programming code stored separately from the service container, such that the at least one segment of programming code referenced by the code object includes programming code required to enable the specific function corresponding to the service container to be achieved; and a loader identification, the loader identification providing the program with information required to load the segment of programming code

referenced by the code object; requesting an input to be processed to obtain an output; identifying one of the plurality of service containers whose corresponding specific function is able to process the input; parsing the service container thus identified, to determine: data required to enable the specific function corresponding to the service container to be achieved; an identity of the at least one segment of programming code required to enable the specific function corresponding to the service container to be achieved; and information required to load each segment of programming code referenced by the code object; retrieving the at least one segment of programming code required to enable the specific function corresponding to the service, container to be achieved; and executing the at least one segment of computer code under the control of the computer program to process the input and obtain the output, wherein said computer program is not directed to the at least one segment of computer code by any embedded link referenced by said computer program

(Doyle teaches a design that features a "list of applications," (column 15, line 14, Doyle). The list of applications allows an application to be selected to run along with the original program to provide an output from an input that the original program alone would be unable to provide as claimed. In addition, since the list of applications is initiated by the system, there must exist a service manager as claimed. However, such means are not expressly stated within Doyle's design.

Held discloses a design allowing a second program or process to be called to assist a first program to perform a desired task on data (column 3, line 65 – column 4, line 57, Held). Within the disclosure, Held states the existence of a service control manager (equivalent to the service manager) (column 4, line 16, Held). In addition, Held teaches how a surrogate process can be called from a first program without reference to an embedded link. Multiple surrogate process means are taught by Held (column 10, line 14 – column 20, line 37, Held) however, in each of the means, an instance of the surrogate process is equivalent to the service container. Within an instance of a surrogate process, there can be found server code, a registration database and objects. For example purposes, correlations between these surrogate process elements and the claimed service container elements will be drawn using a surrogate process in a network environment (column 10, line 14 – column 11, line 40, Held). An instance of a surrogate process requires objects and multiple types of objects are available that are equivalent to the claimed data object, including class factory object, new object or existing object. As for the claimed code object, Held's design makes use of something called "server code." A "server code" is used to reference to executable code. Finally, Held's design makes use of a registration database. It allows elements to be located and hence means for the claimed "loader identification" are present within Held's design as well.

Both Doyle and Held teach systems allowing one program to call upon another program to perform an operation on a piece of data. Hence, it would



have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Doyle with those of Held, to provide a method for transparently executing code using a surrogate process (column 3, line 67 – column 4, line 1, Held)).

### ***Response to Remarks***

The amendment received on September 30, 2005 has been carefully examined but is not deemed fully persuasive. The claim amendments have been reviewed and the prior art has been further evaluated. After extensive analysis of the prior art, the examiner has concluded that multiple surrogate process means are taught by Held (column 10, line 14 – column 20, line 37, Held) however, in each of the means, an instance of the surrogate process is equivalent to the service container. Multiple instances of surrogate processes are possible. Within an instance of a surrogate process, there can be found server code, a registration database and objects. For example purposes, correlations between these surrogate process elements and the claimed service container elements will be drawn using a surrogate process in a network environment (column 10, line 14 – column 11, line 40, Held). An instance of a surrogate process requires objects and multiple types of objects are available that are equivalent to the claimed data object, including class factory object, new object or existing object. As for the claimed code object, Held's design makes use of something called "server code." A "server code" is used to reference to executable code. Finally,

Art Unit: 2145

Held's design makes use of a registration database. It allows elements to be located and hence means for the claimed "loader identification" are present within Held's design as well.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC

  
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